

REMARKS

By this response, claims 2-4 have been canceled without prejudice to or disclaimer of the subject matter contained therein; claims 1, 6-9, 14, 22 and 26 have been amended; and new claim 33 has been added, leaving claims 1 and 5-33 pending in the application.

Reconsideration, reexamination and allowance of the application are respectfully requested in light of the following remarks.

Allowable Subject Matter

Applicants gratefully acknowledge that claims 14-25, 29 and 30 have been indicated to contain allowable subject matter. Claim 14 has been rewritten in independent form to recite the combined features of original claims 1 and 14, and thus is allowable. Accordingly, dependent claims 15-18 are also allowable. For the reasons stated below, Applicants respectfully submit that all pending claims are allowable.

First Rejection Under 35 U.S.C. § 102

Claims 1, 2, 4-6, 13, 26-28, 31 and 32 stand rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,232,357 to Dalla Betta et al. ("Dalla Betta '357"). The reasons for the rejection are stated at pages 2-3 of the Office Action.

Claim 1 has been amended to include the features of claims 2 and 3 (which have been canceled), as well as other features discussed below. As claim 3 is not included in this ground of rejection, claim 1 is not anticipated by Dalla Betta '357.

Dependent claims 5-6, 13, 26-28, 31 and 32 are also not anticipated by Dalla Betta '357.

Therefore, withdrawal of the rejection is respectfully requested.

Second Rejection Under 35 U.S.C. § 102

Claims 1, 5, 13 and 31 stand rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,998,056 to Divisek et al. ("Divisek"). The reasons for the rejection are stated at pages 3-4 of the Office Action.

As claim 3 is not included in this ground of rejection, claim 1 is also not anticipated by Divisek. Dependent claims 5, 13 and 31 are also not anticipated by Divisek.

Therefore, withdrawal of the rejection is respectfully requested.

First Rejection Under 35 U.S.C. § 103

Claims 7-12 stand rejected under 35 U.S.C. § 103(a) over Dalla Betta '357. The reasons for the rejection are stated at pages 4-5 of the Office Action.

Claims 7-12 depend from claim 1. As claim 3 is not included in this ground of rejection, and claim 1 recites the features of claim 3, claim 1 would not have been rendered obvious by Dalla Betta '357. Accordingly, claims 7-12 are also patentable over Dalla Betta '357.

Withdrawal of the rejection is respectfully requested.

Second Rejection Under 35 U.S.C. § 103

Claim 3 stands rejected under 35 U.S.C. § 103(a) over Dalla Betta '357 in view of U.S. Patent No. 5,518,697 to Dalla Betta et al. ("Dalla Betta '697"). The reasons for the rejection are stated at page 5 of the Office Action.

Claim 1, as amended, recites a catalyzer comprising "a plurality of plane sheets arranged superposed and spaced apart from each other in a stack, each of the plane sheets having a top side and a bottom side, ... a corrugated sheet uncoated with a catalytic coating and having a plurality of ridges and grooves disposed within the channel, the ridges being connected to the plane sheets of the channel and the grooves being substantially parallel to the flow direction; and a catalytic coating disposed on a predetermined section of at least one of the top side and the bottom side of each plane sheet and defining a coated section which only partially covers the top side and/or the bottom side, the coated section positioned opposite to an uncoated section of the plane sheet ... the plane sheet" (emphasis added).

As recited in claim 1, the catalyzer comprises "a corrugated sheet uncoated with a catalytic coating" and "a catalytic coating disposed on a predetermined section of at least one of the top side and the bottom side of each plane sheet and defining a coated section which only partially covers the top side and/or the bottom side" (emphasis added). In other words, the catalytic coating is not disposed on the entire top side or the entire bottom side of the plane sheet. For example, in the embodiment shown in Fig. 1, a catalytic coating is disposed on the top side (11) and the bottom side (12). However, neither the top side nor the bottom side of the plane

sheet is fully coated with the catalytic coating. See also the embodiment shown in Fig. 9, which includes a catalytic coating on one side of some of the plane sheets.

The applied references fail to suggest the catalyzer recited in claim 1 for the following reasons. Dalla Betta '357 discloses heat exchange catalyst structures. In the embodiment shown in Fig. 3A of Dalla Betta '357, a catalyst coating 32 is provided on the corrugated metal strip 30. The separator strip 34 does not have a catalytic coating. See column 10, lines 52-54. As shown in Fig. 3B of Dalla Betta '357, the corrugated strips 36 and the flat strips 38 are fully coated on one side with catalyst. See column 10, lines 56-59. See also Fig. 4, which shows the flat sheets 44 fully coated on one side with the catalyst. However, Dalla Betta '357 does not disclose the features of "a catalytic coating disposed on a predetermined section of at least one of the top side and the bottom side of each plane sheet and defining a coated section which only partially covers the top side and/or the bottom side" (emphasis added), as recited in claim 1.

The Office Action asserts that Dalla Betta '697 discloses a corrugated sheet uncoated with a catalytic coating. At the least, Dalla Betta '697 fails to cure the above-described deficiencies of Dalla Betta '357 with respect to claim 1. Particularly, Dalla Betta '687 provides no motivation to modify Dalla Betta '357 to produce the catalyzer comprising the combination of features recited in claim 1, including "a catalytic coating disposed on a predetermined section of at least one of the top side and the bottom side of each plane sheet and defining a coated section which only partially covers the top side and/or the bottom side" (emphasis added). Accordingly, claim 1 is also patentable.

Therefore, withdrawal of the rejection is respectfully requested.

New Claim

New independent claim 33 recites the features of original claims 1, 2 and 4, as well as "a catalytic coating disposed on a predetermined section of at least one of the top side and the bottom side of each plane sheet and defining a coated section which only partially covers the top side and/or the bottom side, the coated section positioned opposite to an uncoated section of the plane sheet." For reasons discussed above, Dalla Betta '357 fails to suggest the catalyzer recited in claim 33. Accordingly, claim 33 is also patentable.

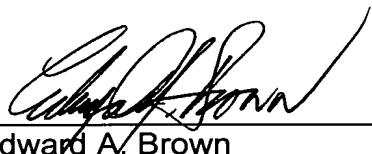
Conclusion

For the foregoing reasons, allowance of the application is respectfully requested. Should there be a need to discuss this response, Applicants' undersigned representative can be reached at the telephone number given below.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: April 5, 2005

By: 

Edward A. Brown
Registration No. 35,033

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620